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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,008	07/03/2002	Gilbert Wolrich	10559-311US1	5753

7590 05/06/2005

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EXAMINER	
PAN, DANIEL H	

ART UNIT	PAPER NUMBER
2183	

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/070,008	WOLRICH ET AL.	
	Examiner	Art Unit	
	Daniel Pan	2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *13/13/04,12/06/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-21 remain for examination.

2. Upon further review and consideration and based the recent tech center guideline, the following action includes "101" rejection. Since no guideline existed during the first examination, this is a non-final action to allow applicant a chance to respond,. The response to applicant's remarks regarding to the art rejections will set forth in the previous action be included later in this office action.

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention is directed to non-statutory subject matter.

3. Claim 1 is rejected under 35 U.S.C. 101 because the step of directing the branch in execution of an instruction stream based on the specified value being true or false and including the token specifying the number of instructions before branch could be represented by symbols in a flowchart by pencil on a paper. Although the claim recites "execution of an instruction", it does not require the use of hardware. For example, it could be represented by a branch of an instruction symbol in a flow chart diagram based on the true or false labels or token label determination on a paper. Although applicant taught a microprogram stored in a RAM (see page 4, lines 16-30), which is tangible, applicant also taught symbolic labels for the instruction format (see page 13, lines 10-24), and the branch execution can be accomplished by a lookup tables on paper (see tables 1-12), which is does not necessarily require hardware, and

is therefore, not tangible. Suggestions : the structural relationship of the processor and the executed instruction would be helpful. Claim is directed to process that does nothing more than solve mathematical problems or manipulate abstract ideas or concepts. If the "acts" of a claimed process manipulate only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the acts are not being applied to appropriate subject matter. Schrader, 22 F.3d at 294-95, 30 USPQ2d at 1458-59. Thus, a process consisting solely of mathematical operations, i.e., converting one set of numbers into another set of numbers, does not manipulate appropriate subject matter and thus cannot constitute a statutory process. In practical terms, claims define nonstatutory processes if they:

– consist solely of mathematical operations without some claimed practical application (i.e., executing a "mathematical algorithm"); or simply manipulate abstract ideas, e.g., a bid (Schrader, 22 F.3d at 293-94, 30 USPQ2d at 1458-59) or a bubble hierarchy (Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759), without some claimed practical application. Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer- readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the

computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions. Computer programs are often recited as part of a claim. Office personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material.

When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. Although applicant recites "processor" in preamble, the claim body does not define any structural and functional interrelationships between the computer program and other claimed elements of a computer or processor which permit the

computer program's functionality to be realized. And therefore, it is directed to non-statutory subject matter.

4. The following is in response to the applicant's amendment filed on 02/22/05.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-9,11-13,15,17,19-21 are rejected under 35 U.S.C. 102(a) and (b) as being anticipated by Hasegawa (5,724,563).

6. The rejections under 35 U.S.C. 102(a) in the paragraph 4343 of the last Office action on 12/14/04 was intended to be used for both 35 U.S.C. 102(a) and (b), and the letter (b) was inadvertently missed in the formulation, however, the 35 U.S.C. 102 (b) statue was clearly cited in page 2 , lines 7-9 in the last Office action .

7. As to the newly amended feature of claim 1, the change of "a branch instruction that causes" to " directing a branch instruction" does not affect the original scope of the claim. Hasegawa's branch instruction also directed a branch (see the branch flow in col.3, lines 25-30, lines 55-59, col.9, lines 29-33, col.12, lines 37-46, see fig.5B, fig,10B).

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa (5,724,563) in view of Khim Yeoh et al. (5,274,770).

9. Claims 14,16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa (5,724,563) in view of Brucker et al. (4,742,451).

10. The rejections of the "102" and "103" are maintained and incorporated by reference the last office action on 12/14/04.

11. The response on 02/22/05 has been fully considered but is not persuasive.

12. In the remarks, applicant argued that :

a) Hasegawa did not teach the "true" and "false" or "value".

13. As to a) above, Hasegawa did disclose a directing of a branch (see the branch instruction IBranch) that caused a branch in execution of an instruction stream (instruction at the target address and the sequence) based on any specified value being true or false: and including a token that specified number of instructions in an instruction stream that were after the branch instruction (see the instructions following the Branch) to execute before the branch operation (see the number of successive instructions designated by the predictive branch before the branch control flow was changed in col.3, lines 25-30, lines 55-59, col.9, lines 29-33, col.12, lines 37- 46, see figs., 10B Branch after 3 to X , Branch after 3 to X, Branch after 4 to X, see the **decision on**

branch condition in col.l, lines 19-22 for the background teaching of **true or false**, see also col.l 1 , lines 14-24, col.12, lines 6-13 **for judging a branch condition**).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 703 305 9696, or the new number 571 272 4172. The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 703 305 9712, or the new number 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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